

## **REMARKS**

Applicants respectfully request reconsideration an allowance of the above-identified patent application. Claims 1-6, 9-21, 23, 25-28, and claims 32-45 are pending, of which claims 1, 18, 19-21, and 25 have been amended and claims 32-45 are new, and 22 has been canceled.

Initially, Applicants and Applicants' attorney express appreciation to the Examiner for the courtesies extended during the telephonic conversation of October 25, 2007. The amendments and following arguments submitted in this paper are consistent with those presented during the course of the discussions.

In the Office action, the independent claims are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,675,450 to Toub et al. ("*Toub*"). Applicants respectfully traverse these grounds of rejection.<sup>1</sup>

As previously noted, the present invention generally relates to mechanisms for applying and displaying element behaviors in web pages. In the past, element behaviors were merely "attached" to the respective element. That is, the code representing the behavior was merely associated with (but not bound to) the code representing the element. As such, when a web page was accessed by a browser and subsequently interpreted (element by element), the behavior was not interpreted until after instantiation of the element itself. In other words, the behavior component remained attached to an associated element, but not executed until some behavior activation condition was met.

According to an embodiment of the present invention, however, the component behavior is synchronously bound to an associated element. That is, the code importing and representing the behavior is intermixed with the code representing the element. As such, when a web page is accessed by a browser and subsequently interpreted (again element by element), the behavior is instantiated prior to the interpretation of the associated element. Put another way, because the behavior component is bound to the element, the behavior component is interpreted before the element is interpreted so that the element may be immediately and properly presented when displayed. In addition, because the instances of element behaviors are immediately and

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<sup>1</sup> Although the prior art status of the cited art is not being challenged at this time, Applicant(s) reserve the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

declaratively available, it is unnecessary to add event-handling functions to check to see if the behavior component has been downloaded and initialized.

More specifically, embodiments synchronously bind element behaviors to a respective element by providing a special processing instruction used to import into a web page the element behavior, which encapsulates specific functionality therein. Upon parsing the web page, and more specifically the import instruction, the element behavior is initialized. Such parsing then produces instances of the behavior making the specific functionality immediately and declaratively available as soon as it has been downloaded and parsed. According, the element behavior cannot be disconnected from the underlying element using script or any other mechanisms. In addition, because the initialization of element behavior occurs before the parsing of any of its bound elements, the unpredictability of asynchronous parsing of a document is removed as is common with "attached" behaviors.

Please note that independent claims 1, 18, 25, and 34 claim various features of the above described embodiments. Although the above description generally describes these embodiments in combination, all of these features should not be applied to each of the independent claims.

Claim 1 is directed toward some of the embodiments mentioned above and recites a method of synchronously binding a behavior component to the element in order to: prevent the behavior from being detached there from; promote predictability in the behavior; or reduce the need to add event-handling functions to check to see if the component has been downloaded and initialized. First, the method receives at a browser application a page for processing and displaying element(s) therein. Upon an initial automatic parsing of the page, an import instruction within the page is then processed that links implementation of an element behavior with at least one of the elements in the page, wherein the element behavior encapsulates specific functionality or behavior of the element upon display. Next, upon parsing of the import instruction, instances of the element behavior are produced for the element of the page making the specific functionality immediately and declaratively available, which synchronously binds the element behavior to the element.

Independent claims 18, 25, and 34 disclose a computer program product, computer-readable medium, and a method with elements similar to those described above with regard to claim 1. Further, claim 18 recites that: (1) the instantiation of the element behavior component occurs before the interpreting of the element; and (2) upon processing of the element, an initial

behavior thereof is modified with the instance of the element behavior previously instantiated. Moreover, claim 25 also provides that: (1) the element behavior is a file or binary component separate from the page; (2) a namespace declaration is used to ensure that the element behavior component has a unique qualifier; (3) the import instruction imports the elements behavior into the namespace declared; and (4) the element references the namespace. In addition, claim 34 recites a method with elements of some combination of independent claims 1, 18, and 25, as well as other advantageous features.

Applicants respectfully submit that the cited *Toub* reference does not anticipate the current claimed invention for at least the reason that the cited art does not teach each and every element of the independent claims.<sup>2</sup> For example, the cited *Toub* reference does not disclose that upon an initial automatic parsing of a page, processing from within the page an import instructions; and upon parsing of the import instruction, producing instances of an element behavior for an element making the specific functionality immediately and declaratively available, which synchronously binds the element behavior to the element, as recited, *inter alia*, in claim 1. Further, *Toub* does not teach any of the following: (1) that the instantiation of the element behavior component occurs before the interpreting of the element; (2) that upon processing of the element, an initial behavior thereof is modified with the instance of the element behavior previously instantiated; (3) that the element behavior is a file or binary component separate from the page; (4) that a namespace declaration is used to ensure that the element behavior component has a unique qualifier; (5) that the import instruction imports the elements behavior into the namespace declared; and (6) that the element references the namespace, as recited, *inter alia*, in one or more of claim 18, 25, and 34.

*Toub* discloses an interactive data-bound control. Although *Toub* discloses using DHTML for an interactive data-bound control, *Toub* does not teach making the interactive data-bound control immediately and declaratively available; thereby synchronously binding the element behavior to the elements within a web page. In fact, as previously mentioned, *Toub* has "attached" behaviors similar to the prior art discussed in Applicants' background and previous

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<sup>2</sup> "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131. That is, "for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly." MPEP § 706.02. Applicant also note that "[i]n determining that quantum of prior art disclosure which is necessary to declare an applicant's invention 'not novel' or 'anticipated' within section 102, the stated test is whether a reference contains

responses. More specifically, *Toub* is silent with respect to "processing an import instruction within a page"; and therefore, cannot possibly disclose "upon parsing of an import instruction, producing instances of an element behavior making the specific functionality immediately and declaratively available." Instead, *Toub* only executes a handler or code for modifying an appearance of an element when an event occurs (such as user interaction for selecting or manipulating the interactive data-bound control).

In other words, in order to implement an element behavior, an event such as user interaction must occur. (See, e.g., col. 5 ll. 43-49). Nevertheless, in response to Applicants' previous arguments, the Office action appears to state that col. 5, ll. 35-51, of *Toub* discloses the import instruction of the present claims.<sup>3</sup> As noted by the Office, this cited section of *Toub* clearly states that "[w]hen an event occurs, the handler for that event is called ...[and] *within the handler*, checks are made to determine which element within the interactive data-bound control 262 invoked the event." *Toub* then states that "[t]he present state of the interactive data-bound control 262 is assessed, **and, then, the code is executed to effect changes in the layout of the control as appropriate to reflect the user actions.**" (Emphasis added. See col. 5, ll. 43-51). In other words, a handler (which is code executed separate from, and external to, the initial processing of the page) initiates changes to an element displayed based on an event (i.e., user interaction) that occurs subsequent to the initial processing of the web page itself.

Because instantiation of the change to the element is *initiated by code external to the page itself based on some user interaction that occurs after the initial processing of the page*, *Toub* does not make instances of DHTML immediately available upon processing of an import instruction within the page. As such, *Toub* actually "teaches away" from Applicants' claimed invention of "**upon an initial automatic parsing of the page, processing from within the page an import instruction**" and "**upon parsing of the import instruction, producing instances of an element behavior** for an element making the specific functionality immediately and declaratively available, which synchronously binds the element behavior to the element," as recited, *inter alia*, in claim 1.

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an 'enabling disclosure.'" MPEP § 2121.01. In other words, a cited reference must be enabled with respect to each claim limitation.

<sup>3</sup> Applicants respectfully note that *Toub* is published in columns. As such, Applicants' assume that the Office's reference to line numbers in "page" is a typographical error since such citation of a page number without also referencing a cited column would be ambiguous. As such, Applicants have responded to the Office action as if it

Nevertheless, assuming that *Toub* did disclose (or suggest) that the initialization of the behavior applied to the element occurred as claimed, *Toub* does not disclose (or suggest) any specific processing order of elements relative to their attributes during the processing of the page, nor does *Toub* disclose any detailed structuring or features related to the DHTML components themselves. As such, *Toub* cannot possibly teach any of the following: (1) that the instantiation of the element behavior component occurs before the interpreting of the element; (2) that upon processing of the element, an initial behavior thereof is modified with the instance of the element behavior previously instantiated; (3) that the element behavior is a file or binary component separate from the page; (4) that a namespace declaration is used to ensure that the element behavior component has a unique qualifier; (5) that the import instruction imports the elements behavior into the namespace declared; and (6) that the element references the namespace, as recited, *inter alia*, in one or more of claim 18, 25, and 34. Because *Toub* does not disclose (or even suggest) each and every element of Applicants' claimed invention, and because *Toub* also "teaches away" from the claims, *Toub* does not anticipate claims 1, 18, 25, and 34.

Newly added independent claims 38, 40, and 44 describe embodiments outlined in the specification that pertain to the view link mechanism, lightweight HTML components, and literal content attributes, respectively. As discussed with the Examiner, these features are described in greater detail under the appropriate headings outlined in the Specification. Applicants note that each of these independent claims have additional features also not disclose (or suggested) by *Toub* or other art of record; and are therefore, these claims are also patentably distinct over the cited prior art.

Based on at least the foregoing reasons, Applicants respectfully submit that the cited prior art fails to anticipate or otherwise make obvious Applicants' invention as claimed for example, in independent claims 1, 18, 25, 34, 38, 40, and 44. Applicants note for the record that the remarks above render the remaining rejections of record for the independent and dependent claims moot, and thus addressing individual rejections or assertions with respect to the teachings of the cited art is unnecessary at the present time, but may be undertaken in the future if necessary or desirable and Applicants reserve the right to do so.

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cited "col. 5" instead of "page 5". If, however, Applicants' assumption is incorrect, we respectfully request that our understanding be appropriately corrected in the next communication from the Office.

All objections and rejections having been addressed, Applicants respectfully submit that the present application is in condition for allowance, and earnestly solicit notice to this effect. Should any questions arise in conjunction with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at 1-801-533-9800.

DATED this 30<sup>th</sup> day of October, 2007.

Respectfully Submitted,

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